

The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Previously Presented) A semiconductor device comprising:
  - a pixel portion formed over a substrate;
  - a pixel thin film transistor in the pixel portion;
  - a storage capacitor in the pixel portion;
  - a leveling film in the pixel portion, formed over the pixel thin film transistor and the storage capacitor;
  - a pixel electrode in the pixel portion, formed on the leveling film; and
  - a column-shape spacer in the pixel portion formed over the leveling film,wherein the pixel thin film transistor includes:
  - a first region of a semiconductor film having a channel forming region, a source region and a drain region;
    - a gate insulating film being in contact with the first region; and
    - a gate electrode being formed on the gate insulating film,wherein the storage capacitor includes:
  - a second region of the semiconductor film;
  - an insulating film being in contact with the second region; and
  - a storage wiring being formed on the insulating film,wherein the insulating film in contact with the second region has a thinner thickness than the gate insulating film in contact with the first region,
  - wherein the column-shape spacer has a top surface and a bottom surface, and
  - wherein an area of the bottom surface is larger than an area of the top surface.
2. (Original) The semiconductor device according to claim 1,

wherein one layer in the gate electrode and the storage wiring comprises same material.

3. (Original) The semiconductor device according to claim 1, wherein the storage wiring comprises at least one of aluminum (Al) and copper (Cu).

4. (Original) The semiconductor device according to claim 1, wherein the pixel thin film transistor is an n-channel thin film transistor.

5. (Previously Presented) The semiconductor device according to claim 1, wherein the semiconductor device is one selected from the group consisting of a personal computer, a video camera, a portable information terminal, a digital camera, a digital video disk player, and a projector.

6. (Previously Presented) A semiconductor device comprising:  
a pixel portion and a driver circuit portion formed over a substrate;  
a pixel thin film transistor in the pixel portion;  
a storage capacitor in the pixel portion;  
a leveling film in the pixel portion, formed over the pixel thin film transistor and the storage capacitor;  
a pixel electrode in the pixel portion, formed on the leveling film; and  
a column-shape spacer in the pixel portion, formed over the leveling film,  
wherein the pixel thin film transistor includes:

a first region of a semiconductor film having a channel forming region, a source region and a drain region;

a gate insulating film being in contact with the first region; and

a gate electrode being formed on the gate insulating film,

wherein the storage capacitor includes:

- a second region of the semiconductor film;
- an insulating film being in contact with the second region; and
- a storage wiring being formed on the insulating film,

wherein the insulating film in contact with the second region has a thinner thickness than the gate insulating film in contact with the first region,

wherein the column-shape spacer has a top surface and a bottom surface, and

wherein an area of the bottom surface is larger than an area of the top surface.

7. (Original) The semiconductor device according to claim 6,  
wherein one layer in the gate electrode and the storage wiring comprises same material.

8. (Original) The semiconductor device according to claim 6,  
wherein the storage wiring comprises at least one of aluminum (Al) and copper (Cu).

9. (Original) The semiconductor device according to claim 6,  
wherein the pixel thin film transistor is an n-channel thin film transistor.

10. (Original) The semiconductor device according to claim 6,  
wherein the semiconductor device is one selected from the group consisting of a personal computer, a video camera, a portable information terminal, a digital camera, a digital video disk player and a projector.

11. (Currently Amended) A semiconductor device comprising:  
a pixel portion formed over a substrate;  
a pixel thin film transistor in the pixel portion;

a storage capacitor in the pixel portion;

an n-channel thin film transistor and a p-channel thin film transistor in a driver circuit; and

a leveling film in the pixel portion;

a pixel electrode in the pixel portion, formed on the leveling film; and

a column-shape spacer in the pixel portion, formed over the leveling film,

wherein the pixel thin film transistor includes:

a first region of a first semiconductor film having a first channel forming region, a first source region and a first drain region;

a first gate insulating film being in contact with the first region; and

a first gate electrode being formed on the first gate insulating film,

wherein the storage capacitor includes:

a second region of the first semiconductor film;

an insulating film being in contact with the second region; and

a storage wiring being formed on the insulating film,

wherein the insulating film in contact with the second region has a thinner thickness than the first gate insulating film in contact with the first region,

wherein the n-channel thin film transistor has a second semiconductor film, a second gate insulating film on the second semiconductor film, and a second gate electrode on the second gate insulating film,

wherein the second semiconductor film includes a second channel forming region, a second source region, and a second drain region,

wherein the second gate electrode includes a first conductive layer and a second conductive layer on the first conductive layer,

wherein the column-shape spacer has a top surface and a bottom surface, and

wherein an area of the bottom surface is larger than an area of the top surface.

12. (Original) The semiconductor device according to claim 11,  
wherein the second conductive layer comprises at least one of aluminum (Al) and  
copper (Cu).

13. (Original) The semiconductor device according to claim 11,  
wherein the semiconductor device is one selected from the group consisting of a  
personal computer, a video camera, a portable information terminal, a digital camera, a  
digital video disk player and a projector.

14. (Previously Presented) A semiconductor device comprising:  
a pixel thin film transistor in a pixel portion; and  
a storage capacitor in the pixel portion,  
wherein the pixel thin film transistor includes:  
a first region of a semiconductor film having a channel forming region, an  
LDD region, a source region and a drain region;  
a gate insulating film being in contact with the first region; and  
a gate electrode being formed on the gate insulating film,  
wherein the storage capacitor includes:  
a second region of the semiconductor film;  
an insulating film being in contact with the second region; and  
a storage wiring being formed on the insulating film,  
wherein the insulating film in contact with the second region has a thinner  
thickness than the gate insulating film in contact with the first region, and  
wherein the LDD region comprises a first portion and a second portion,  
wherein a concentration of an element decreases from the first portion to the  
second portion, and  
wherein the second portion is closer to the channel forming region than the first  
portion.

15. (Original) The semiconductor device according to claim 14,  
wherein one layer in the gate electrode and the storage wiring comprises same  
material.

16. (Original) The semiconductor device according to claim 14,  
wherein the storage wiring comprises at least one of aluminum (Al) and copper  
(Cu).

17. (Original) The semiconductor device according to claim 14,  
wherein the pixel thin film transistor is an n-channel thin film transistor.

18. (Canceled)

19. (Original) The semiconductor device according to claim 14,  
wherein the semiconductor device is one selected from the group consisting of a  
personal computer, a video camera, a portable information terminal, a digital camera, a  
digital video disk player and a projector.

20. (Previously Presented) A semiconductor device comprising:  
a pixel portion and a driver circuit portion formed over a substrate;  
a pixel thin film transistor in the pixel portion; and  
a storage capacitor in the pixel portion,  
wherein the pixel thin film transistor includes:

    a first region of a semiconductor film having a channel forming region, an  
LDD region, a source region and a drain region;  
    a gate insulating film being in contact with the first region; and  
    a gate electrode being formed on the gate insulating film,

wherein the storage capacitor includes:

- a second region of the semiconductor film;
- an insulating film being in contact with the second region; and
- a storage wiring being formed on the insulating film,

wherein the insulating film in contact with the second region has a thinner thickness than the gate insulating film in contact with the first region, and

wherein the LDD region comprises a first portion and a second portion,

wherein a concentration of an element decreases from the first portion to the second portion, and

wherein the second portion is closer to the channel forming region than the first portion.

21. (Original) The semiconductor device according to claim 20,  
wherein one layer in the gate electrode and the storage wiring comprises same material.

22. (Original) The semiconductor device according to claim 20,  
wherein the storage wiring comprises at least one of aluminum (Al) and copper (Cu).

23. (Original) The semiconductor device according to claim 20,  
wherein the pixel thin film transistor is an n-channel thin film transistor.

24. (Canceled)

25. (Original) The semiconductor device according to claim 20,

wherein the semiconductor device is one selected from the group consisting of a personal computer, a video camera, a portable information terminal, a digital camera, a digital video disk player and a projector.

26. (Currently Amended) A semiconductor device comprising:

a pixel portion formed over a substrate;

a pixel thin film transistor in the pixel portion;

a storage capacitor in the pixel portion;

an n-channel thin film transistor and a p-channel thin film transistor in a driver circuit;

a leveling film in the pixel portion;

a pixel electrode in the pixel portion, formed on the leveling film; and

a column-shape spacer in the pixel portion, formed over the leveling film,

wherein the pixel thin film transistor includes:

a first region of a first semiconductor film having a first channel forming region, a first source region and a first drain region;

a first gate insulating film being in contact with the first region; and

a first gate electrode being formed on the first gate insulating film,

wherein the storage capacitor includes:

a second region of the first semiconductor film;

an insulating film being in contact with the second region; and

a storage wiring being formed on the insulating film,

wherein the insulating film in contact with the second region has a thinner thickness than the first gate insulating film in contact with the first region,

wherein the n-channel thin film transistor has a second semiconductor film, a second gate insulating film on the second semiconductor film, and a second gate electrode on the second gate insulating film,



wherein the second semiconductor film includes a second channel forming region, an LDD region, a second source region, and a second drain region,

wherein the second gate electrode includes a first conductive layer and a second conductive layer,

wherein the LDD region comprises a first portion and a second portion,

wherein a concentration of an element decreases from the first portion to the second portion, and

wherein the second portion is closer to the second channel forming region than the first portion.

27. (Original) The semiconductor device according to claim 26,  
wherein the storage wiring comprises at least one of aluminum (Al) and copper (Cu).

28. (Canceled)

29. (Original) The semiconductor device according to claim 26,  
wherein the semiconductor device is one selected from the group consisting of a personal computer, a video camera, a portable information terminal, a digital camera, a digital video disk player and a projector.

30. (Previously Presented) The semiconductor device according to claim 1,  
wherein the top surface is a flat surface.

31. (Previously Presented) The semiconductor device according to claim 6,  
wherein the top surface is a flat surface.

32. (Previously Presented) The semiconductor device according to claim 11,  
wherein the top surface is a flat surface.